

ABSTRACT OF THE DISCLOSURE

A¹ The present invention relates to a resin-coated steel sheet for fuel tanks of an automobile and a resin solution used for the same. The resin solution of the present invention comprises (a) a main solution of water soluble phenoxy resin having a number average molecular weight of 25,000 to 50,000, (b) 2 to 15 phr of melamine resin on the basis of the main solution, (c) 10 to 20 phr of colloidal silica on the basis of the main solution, and (d) water soluble ethylene-acryl resin containing 50-80% of ethylene and 50-20% of acryl resin and having a molecular weight of 20,000 to 50,000, in an amount of 5 to 15 phr on the basis of the main solution; and/or 0.5 to 3.0 phr of phosphoric ester on the basis of the main solution. The resin solution is coated on a cold-rolled steel sheet plated with zinc or zinc alloy over which a chromate layer films, and then dried at a local temperature of 160 to 250 °C to prepare a resin-coated steel sheet for fuel tanks of an automobile.